

CLAIMS

What is claimed is:

1. An ice maker, comprising:
first and second pulleys spaced apart from each other;
a drive unit to rotate the first and second pulleys;
an ice making conveyor wrapped around the first and second pulleys, and having ice making parts concavely formed to contain water therein;
a heat/light generating unit located in an interior of the ice making conveyor to generate heat and light; and
a reflecting member to downwardly reflect the heat and the light generated from the heat/light generating unit.
2. The ice maker of claim 1, wherein the heat/light generating unit comprises a halogen lamp to generate the heat and light.
3. The ice maker of claim 1, wherein the reflecting member comprises an arc-shaped cross-section to cover upper and side portions of the heat/light generating unit, to downwardly guide the heat and the light generated from the heat/light generating unit.
4. The ice maker of claim 1, wherein the drive unit transmits power and the first pulley comprises a drive pulley which is rotated by the power transmitted from the drive unit; and
the second pulley comprises a driven pulley which is rotated by the power transmitted from the first pulley through the ice making conveyor.
5. The ice maker of claim 4, further comprising a support bracket located between the drive pulley and the driven pulley, wherein the drive pulley and the driven pulley are respectively located at opposite ends of the support bracket to be spaced apart from each other by a predetermined distance.

6. The ice maker of claim 4, wherein the ice making conveyor further comprises tray cells having the ice making parts, wherein the tray cells are hinged to each other to form the ice conveyor in a closed-loop shape.

7. The ice maker of claim 6, wherein the ice making parts comprises a metal to allow heat to be transferred to each of the ice making parts.

8. The ice maker of claim 6, further comprising an engaging projection projected from an inside portion of each of the tray cells to be subjected to the power transmitted from the drive pulley.

9. The ice maker of claim 8, further comprising engaging holes included on outer circumferential surfaces of the drive and driven pulley at regular intervals to engage with the engaging projections.

10. The ice maker of claim 1, wherein the reflecting member is included at a predetermined position around the heat/light generating units.

11. The ice maker of claim 2, wherein the halogen lamp maintains an interior temperature of at least 250° and is capable of generating light and heat.

12. The ice maker of claim 5, wherein the support bracket is mounted at ends thereof to an interior of a cooling compartment to install the ice maker in the cooling compartment.

13. The ice maker of claim 12, further comprising a mounting bracket included to hold sides of the support bracket to support the ice making conveyor in the cooling compartment.

14. The ice maker of claim 1, further comprising an ice storage tray located under the ice making conveyor to store ice cubes formed in the ice making parts.

15. The ice maker of claim 1, further comprising a water supply pipe located above the ice making conveyor to supply water to the ice making parts.

16. The ice maker of claim 6, wherein the reflecting member concentrates the light on a desired portion of the ice making conveyor to be heated, to allow energy to be efficiently applied to the desired portion, while minimizing an amount of the energy transmitted to the tray cells located above the heat/light generating units.

17. An ice maker, comprising:
a drive pulley and a driven pulley spaced apart from each other;
a drive unit to rotate the drive pulley and the driven pulley;
an ice making conveyor wrapped around the drive and driven pulleys;
tray cells having ice making parts, and hinged to each other to form the ice making conveyor;
heat/light generating units located in an interior of the ice making conveyor to generate heat and light; and
a reflecting member to reflect light upwardly and laterally irradiated from the heat/light generating units.

18. A method of making ice cubes in an ice maker having an ice making conveyor, heat/light generating units and ice making parts, the method comprising:
forming ice cubes in the ice making parts;
operating the ice making conveyor by a drive unit;
transmitting heat and light from the heat/light generating units;
applying light downwardly generated from the heat/light generating units, to the ice making parts;
reflecting light upwardly and laterally irradiated from the heat/light generating units; and
converting the light to heat and removing the ice cubes from the ice making parts.

19. The ice maker of claim 17, wherein the heat/light generating units and the reflecting member allow the ice cubes to be removed from the ice making parts located under the heat/light generating units, and minimize an amount of energy transmitted to the ice making parts located above the heat/light generating units.